

V&V Reference Report

L2 ASCDS Version : 10

Observation 14581 - L2 Version 2
Chandra X-Ray Center

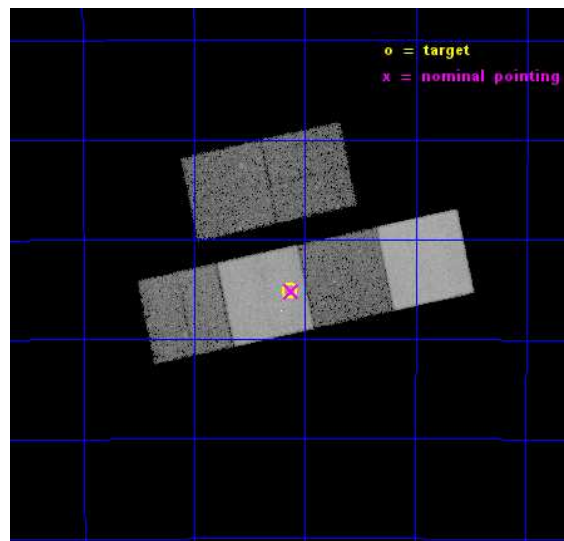
L2 Processing Date : Dec 5 2014

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

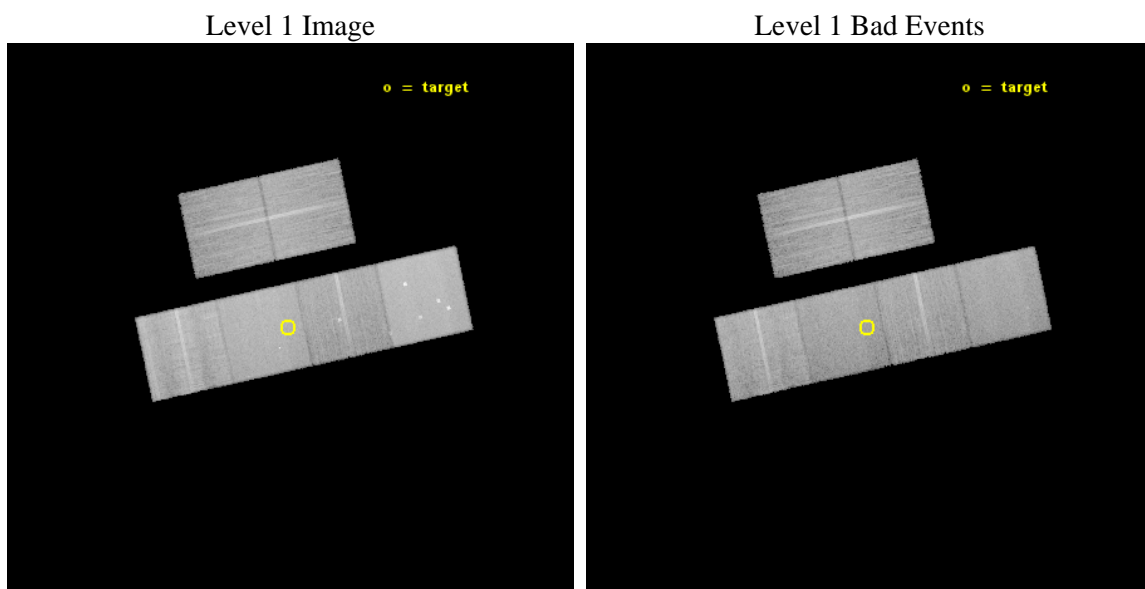
seq_num	200882	Sequence number
obs_id	14581	Observation id
title	COMPACT AND DIFFUSE X-RAY SOURCES IN THE YOUNGEST PLANETARY NEBULAE	
observer	Dr. Joel Kastner	Principal investigator
object	ESO 313-5	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	129.283333	Observer's specified target RA [deg]
dec_targ	-39.418167	Observer's specified target Dec [deg]
ra_nom	129.28057029315	Nominal RA [deg]
dec_nom	-39.420313502812	Nominal Dec [deg]
roll_nom	167.79353365875	Nominal Roll [deg]
revision	2	Processing version of data
ontime	29963.764567435	Sum of GTIs [s]
livetime	29584.345338469	Livetime [s]
ontime2	29960.564616978	Sum of GTIs [s]
ontime3	29963.641447425	Sum of GTIs [s]
ontime5	29963.723527431	Sum of GTIs [s]
ontime6	29963.682487428	Sum of GTIs [s]
ontime7	29963.764567435	Sum of GTIs [s]
ontime8	29963.600407422	Sum of GTIs [s]
l2events	253992	Number of level 2 events



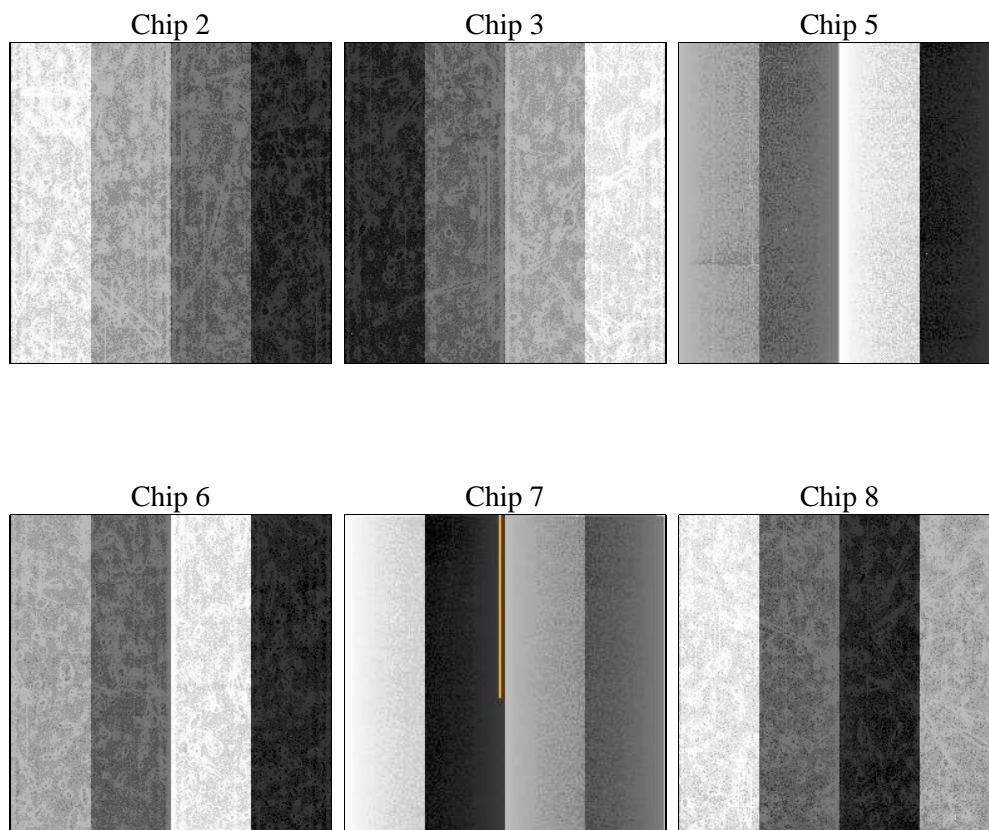
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	29963.764567435	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	29960.564616978	Sum of GTIs [s]
date	2014-12-06T03:38:27	Date and time of file creation	ontime3	29963.641447425	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	29963.723527431	Sum of GTIs [s]
			ontime6	29963.682487428	Sum of GTIs [s]
			ontime7	29963.764567435	Sum of GTIs [s]
			ontime8	29963.600407422	Sum of GTIs [s]
			l1events	1056696	Number of level 1 events

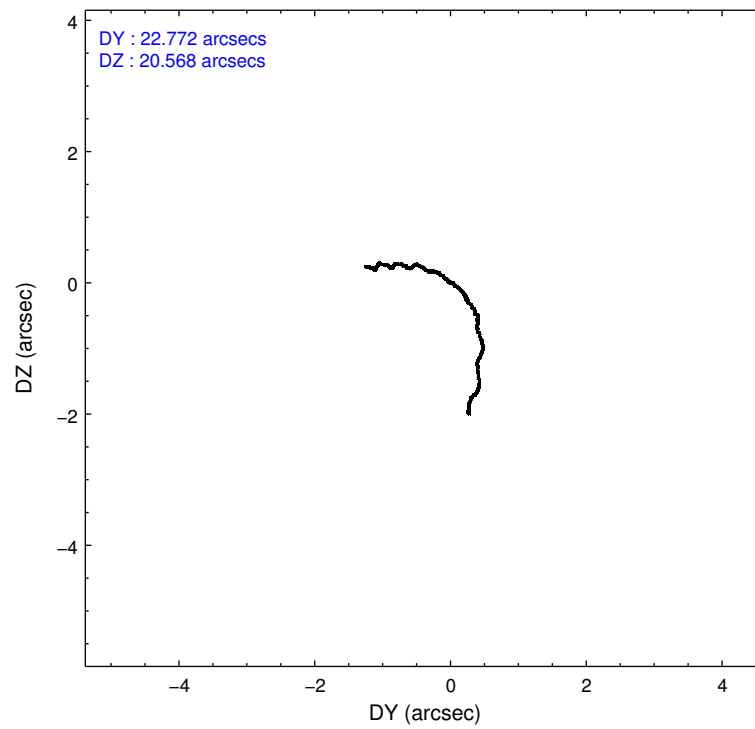
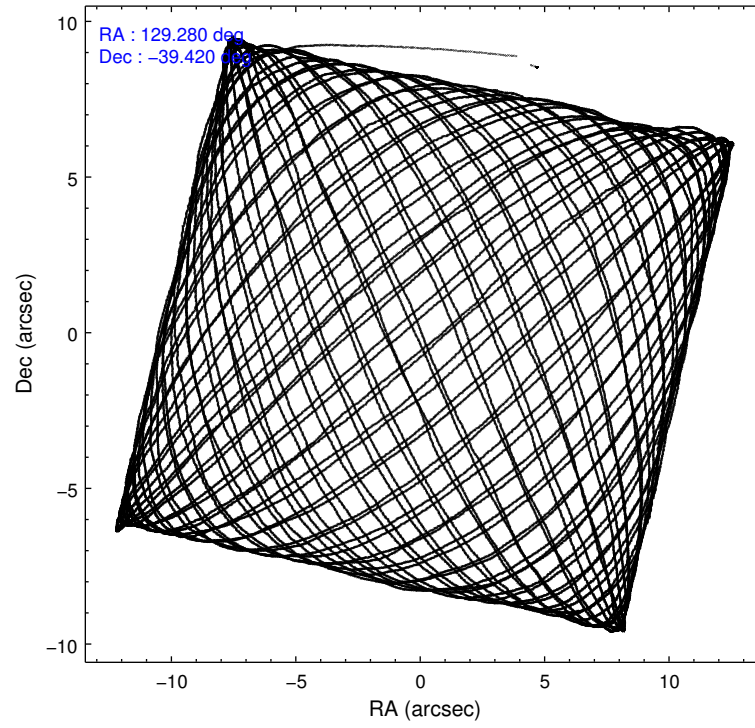
2.1.4 Events

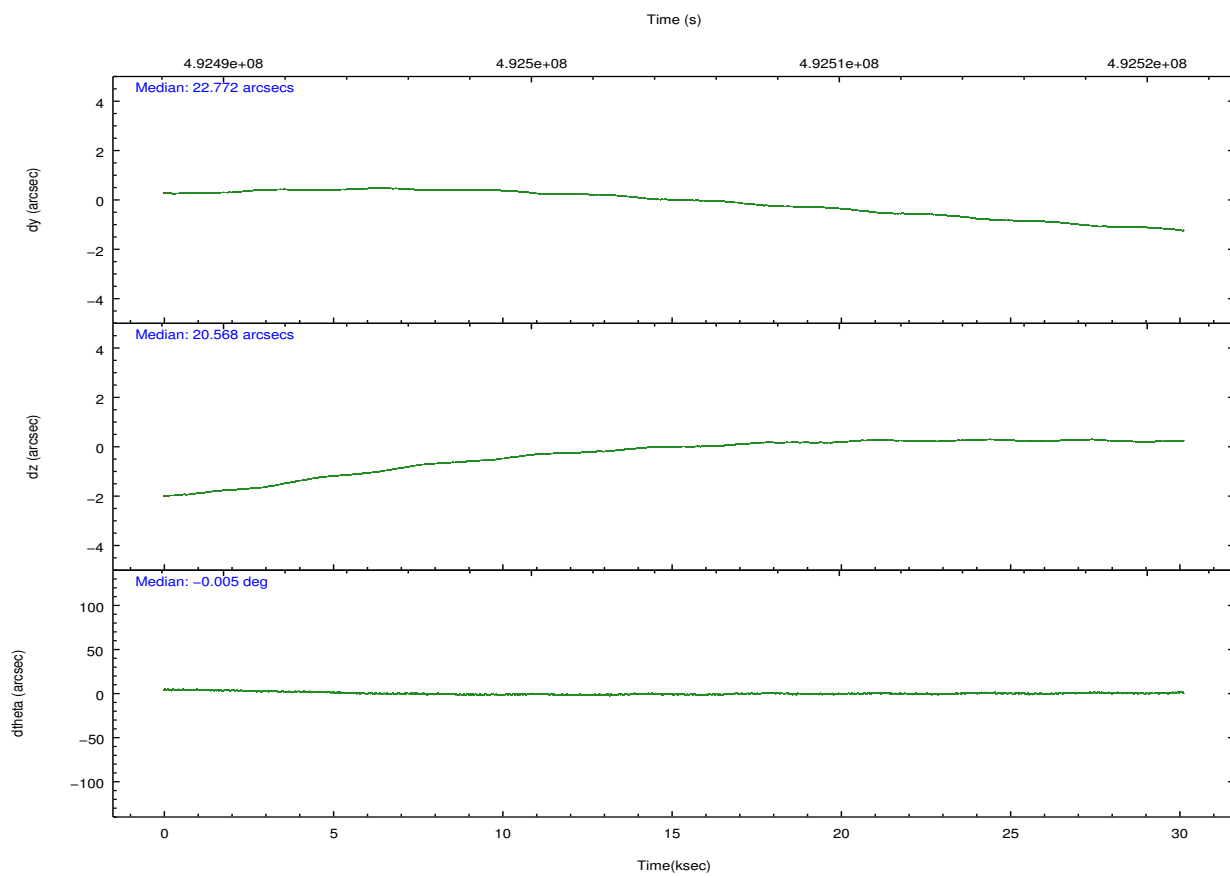
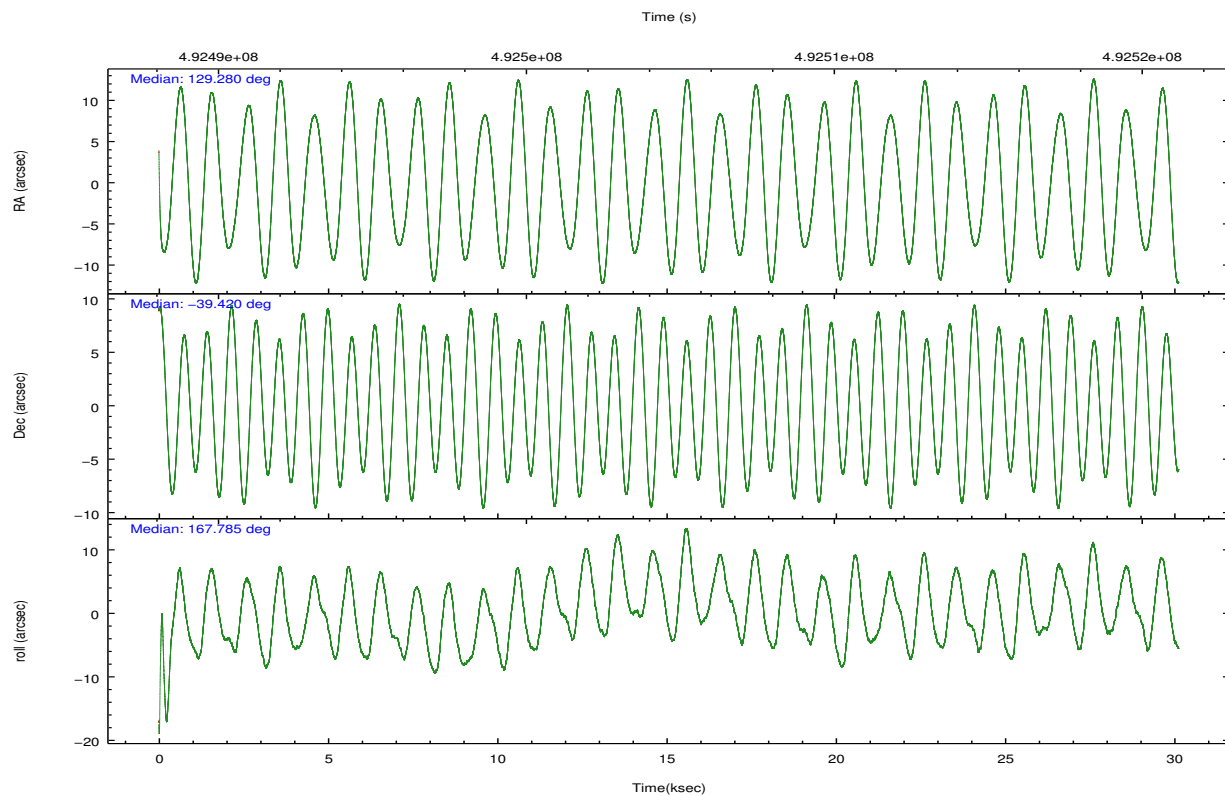
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	148764	134141	241112	143162	195767	193750	grade 0 events	5669	5248	13144	5932	7775	15606
rejected events	132407	118760	123089	124896	109744	141893		3%	3%	5%	4%	3%	8%
rejected %	89%	88%	51%	87%	56%	73%	grade 1 events	89	71	522	67	257	151
								0%	0%	0%	0%	0%	0%
							grade 2 events	4093	3417	34779	4700	17772	12217
								2%	2%	14%	3%	9%	6%
							grade 3 events	1655	1663	4031	1827	7258	5138
								1%	1%	1%	1%	3%	2%
							grade 4 events	1676	1711	3724	1758	7174	4958
								1%	1%	1%	1%	3%	2%
							grade 5 events	6303	7496	17858	7697	20165	10891
								4%	5%	7%	5%	10%	5%
							grade 6 events	3272	3346	62380	4053	46055	13947
								2%	2%	25%	2%	23%	7%
							grade 7 events	126007	111189	104674	117128	89311	130842
								84%	82%	43%	81%	45%	67%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	129.314124	129.2805702931491	CCD I2 on	O3	Y
[deg] Pointing Dec	-39.411602	-39.42031350281208	CCD I3 on	O2	Y
[deg] Pointing Roll	167.658226	167.7935336587543	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.145094680475	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01257209746719923	CCD S4 on	Y	Y
[s] Observation start time (MET)	492489680.184000	492488391.2262	CCD S5 on	N	N
Observation start date	2013-08-10T02:40:13	2013-08-10T02:19:51	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	492519680.184000	492520077.05293	On-chip summing requested	N	N
Observation end date	2013-08-10T11:00:13	2013-08-10T11:07:57	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



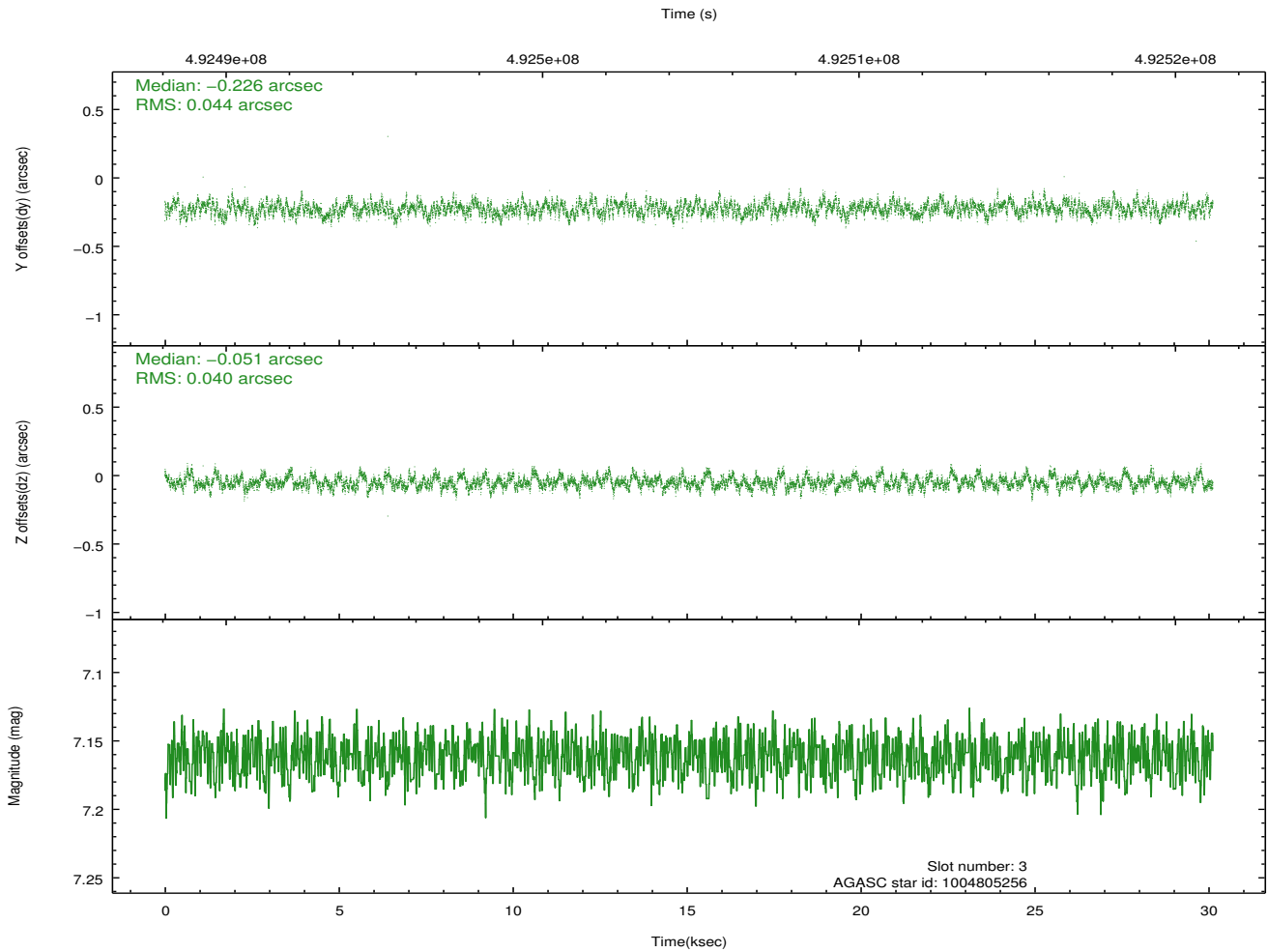
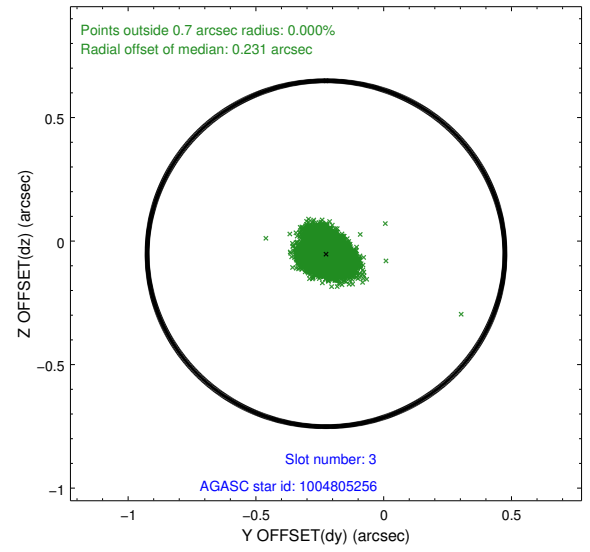
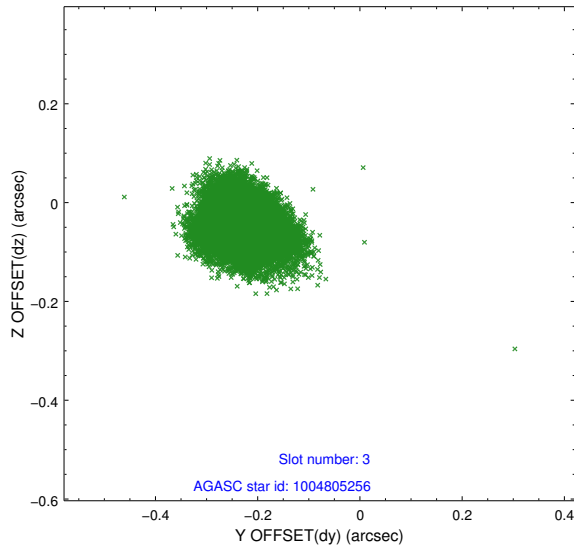


Slot Statistics

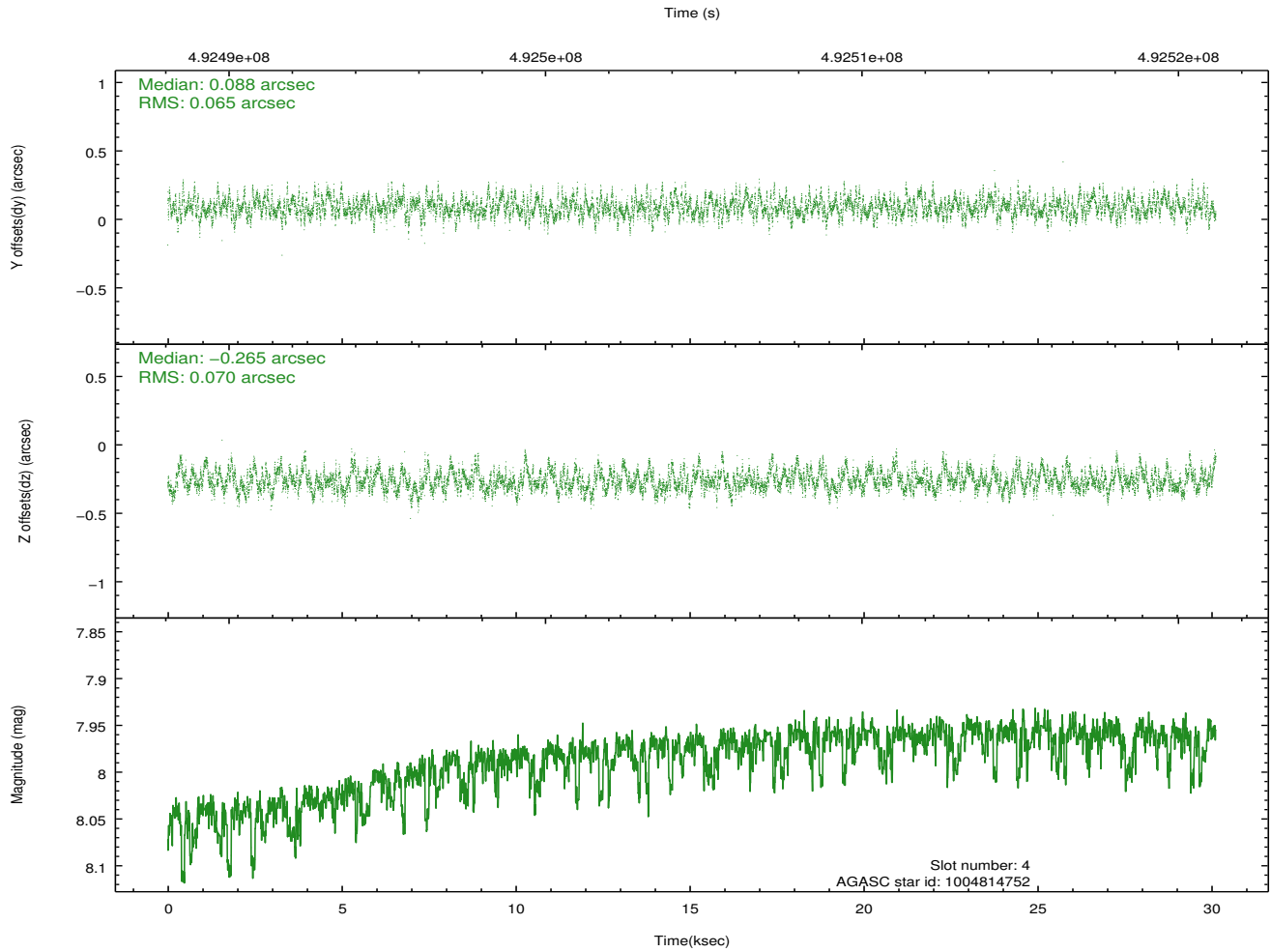
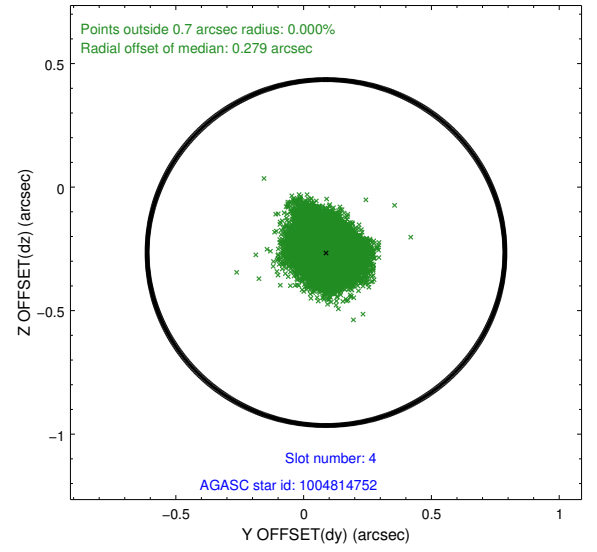
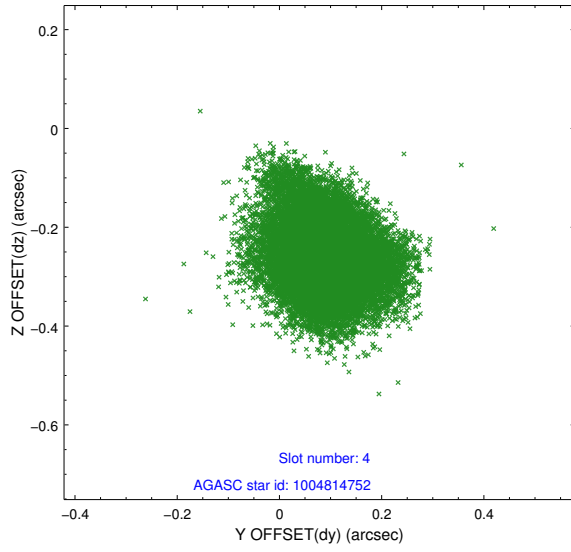
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.98	7348	-0.126	-0.022	0.017	0.046	0.000000	0.000000	-775.92	-1741.68
1	FID		ACIS-S-4	7.07	7348	0.291	0.067	0.034	0.054	0.000000	0.000000	2137.72	166.85
2	FID		ACIS-S-5	7.09	7348	-0.197	-0.036	0.032	0.054	0.000000	0.000000	-1828.75	160.47
3	GUIDE	used	1004805256	7.16	14696	-0.226	-0.051	0.063	0.101	129.547226	-39.536149	-728.45	300.74
4	GUIDE	used	1004814752	7.98	14696	0.088	-0.265	0.102	0.163	129.537413	-40.081089	-1116.42	2223.76
5	GUIDE	used	1004817792	7.68	14690	-0.071	0.026	0.066	0.114	129.828757	-39.799339	-1689.99	1064.07
6	GUIDE	used	1004803976	9.00	14671	0.113	0.318	0.118	0.186	129.564121	-39.417642	-683.87	-125.79
7	GUIDE	used	1004817808	8.85	14678	0.090	-0.035	0.087	0.142	129.891566	-39.791023	-1853.83	998.60

2.4 Star Slots

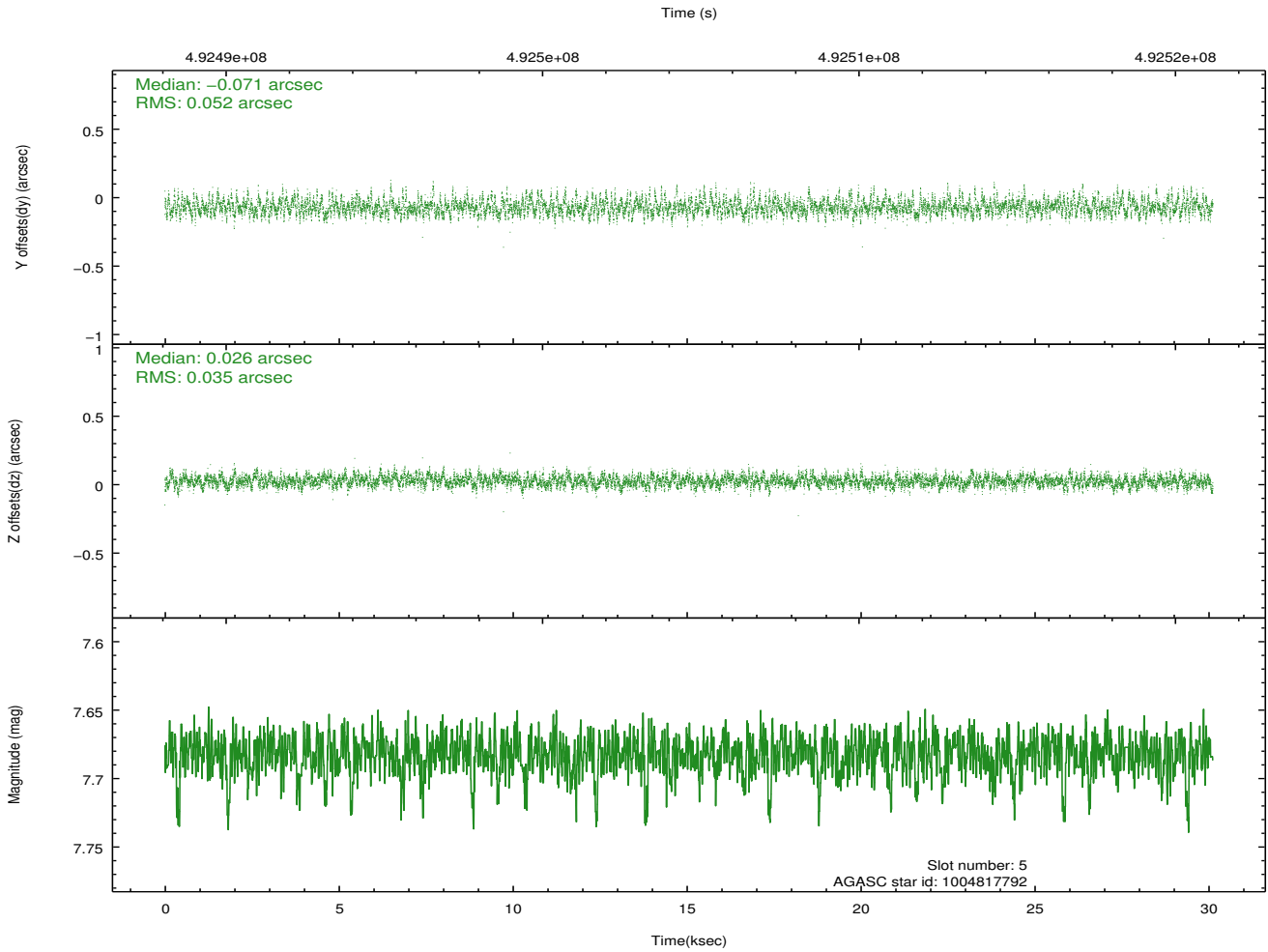
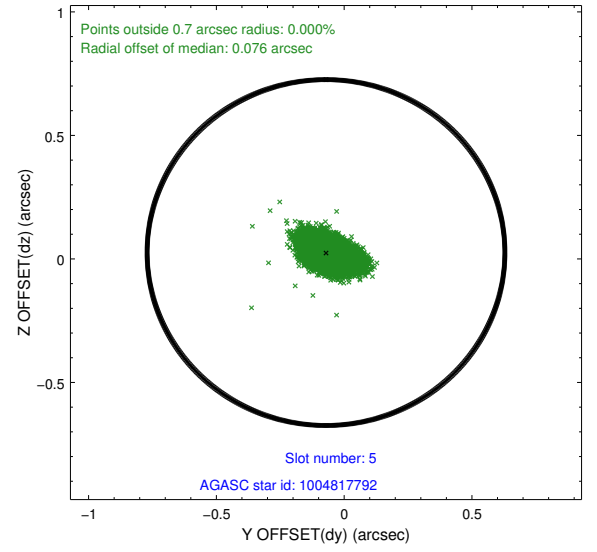
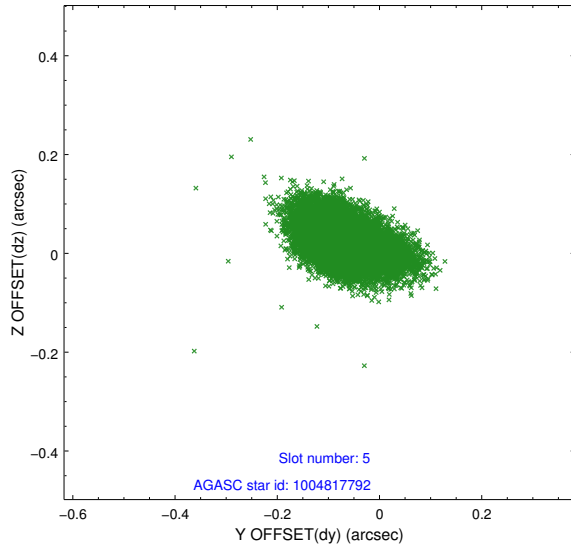
2.4.1 Slot 3



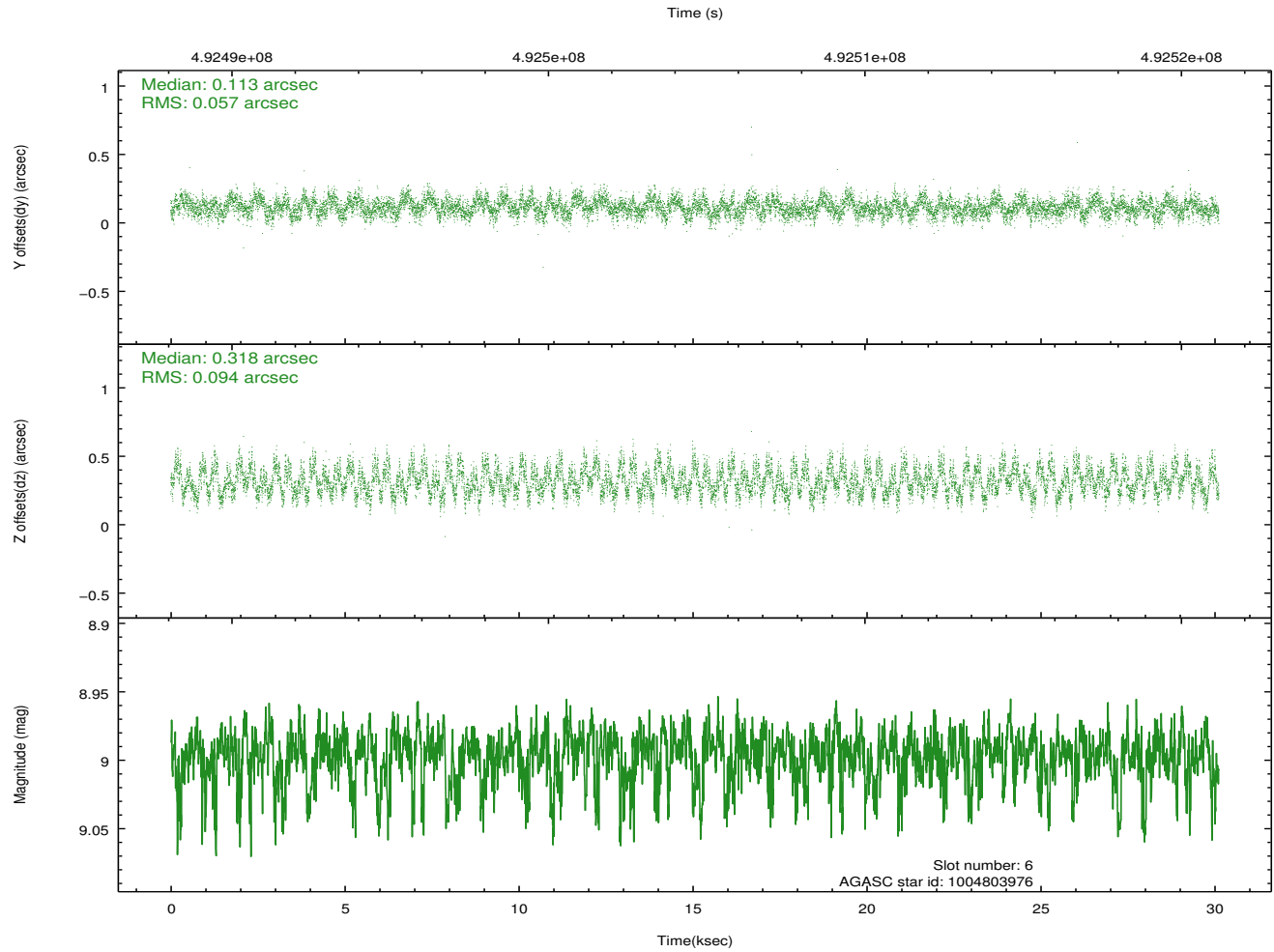
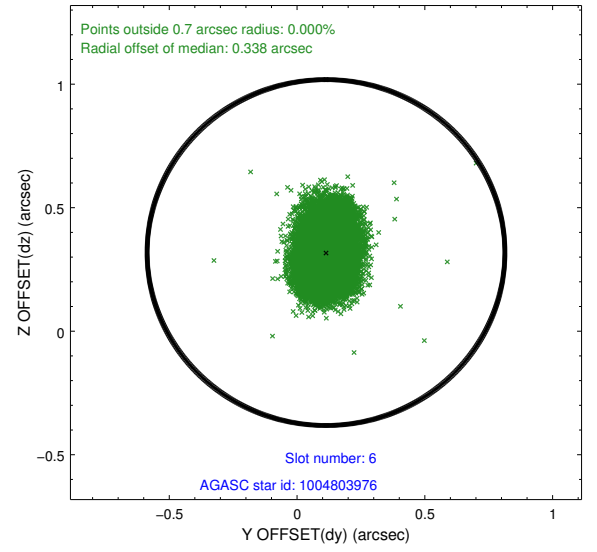
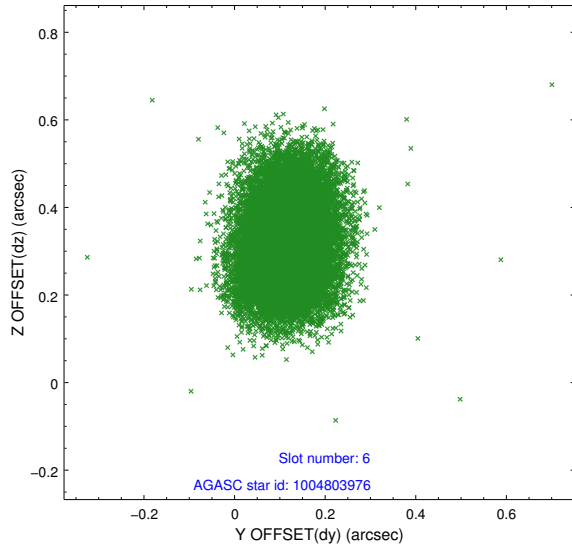
2.4.2 Slot 4



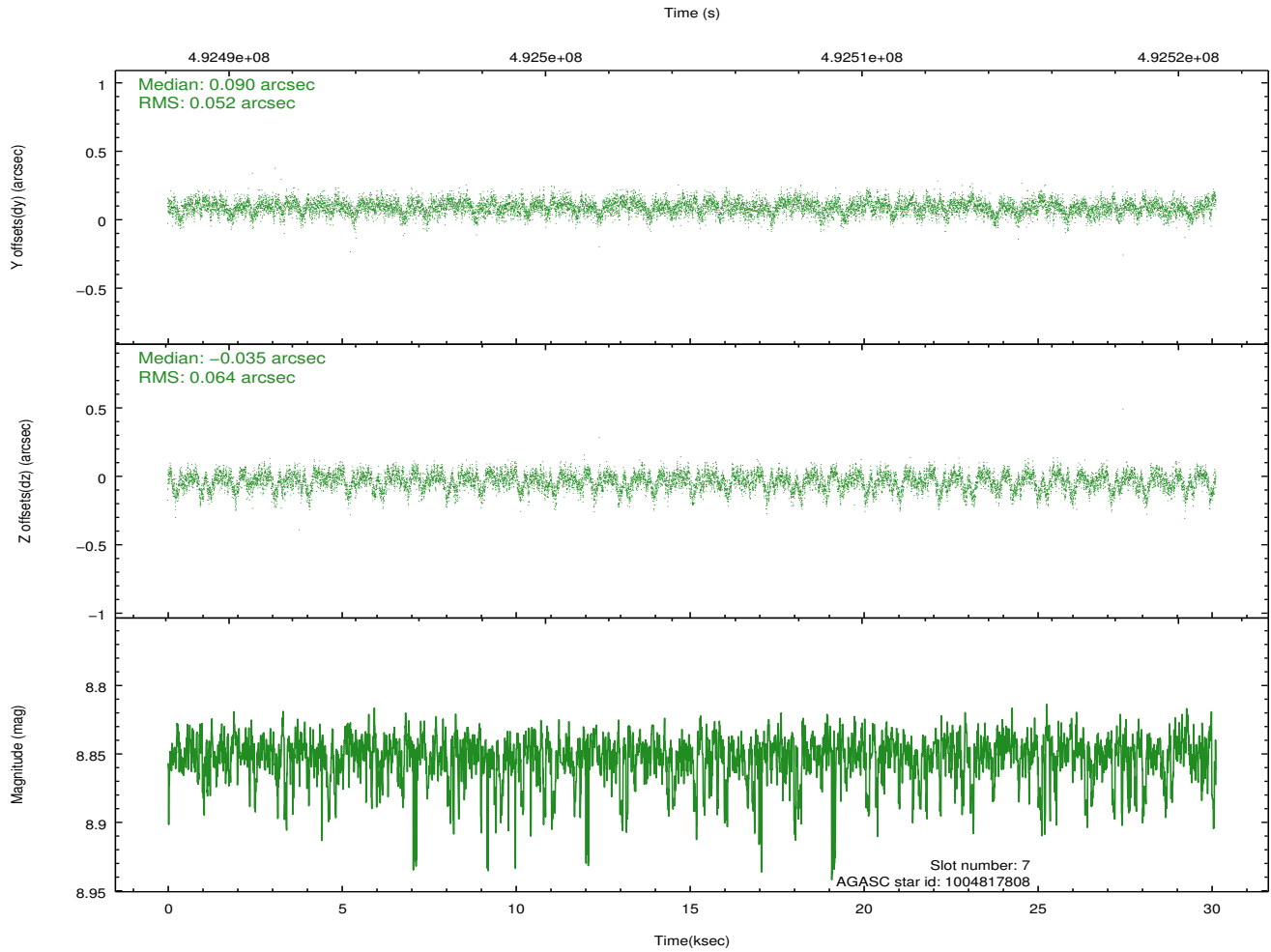
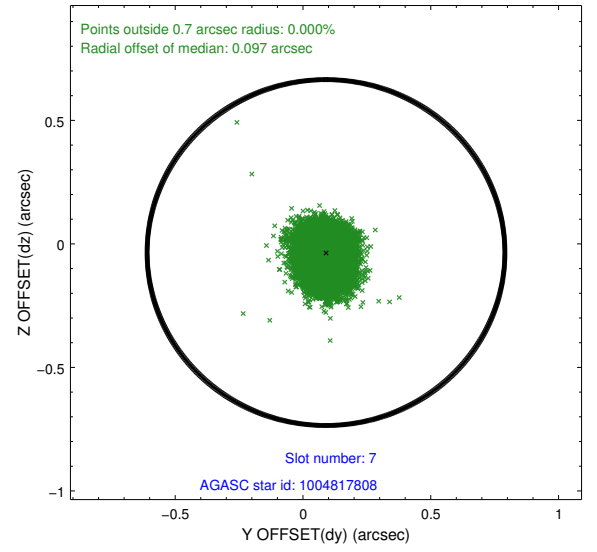
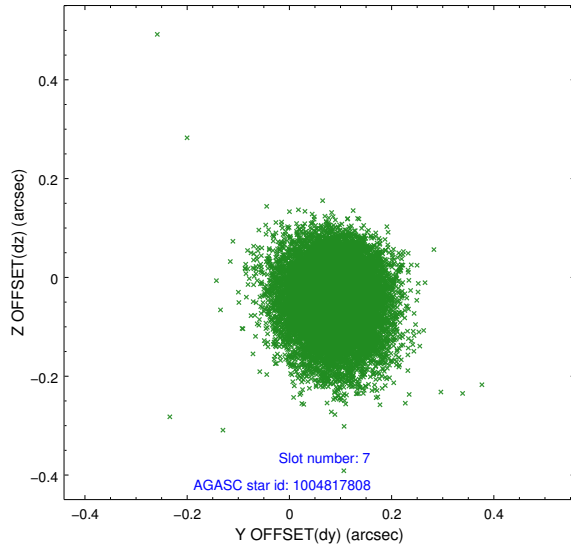
2.4.3 Slot 5



2.4.4 Slot 6

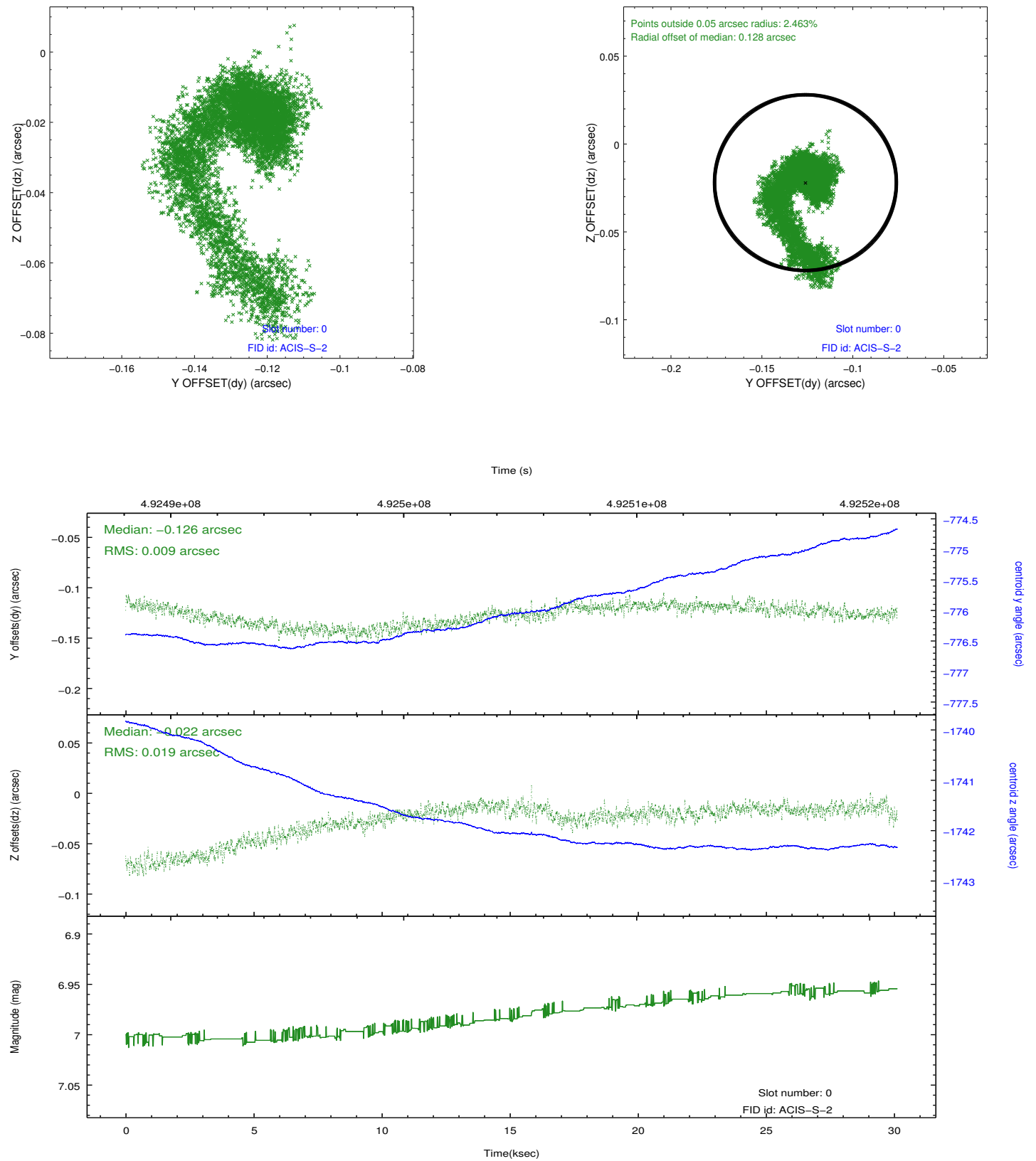


2.4.5 Slot 7

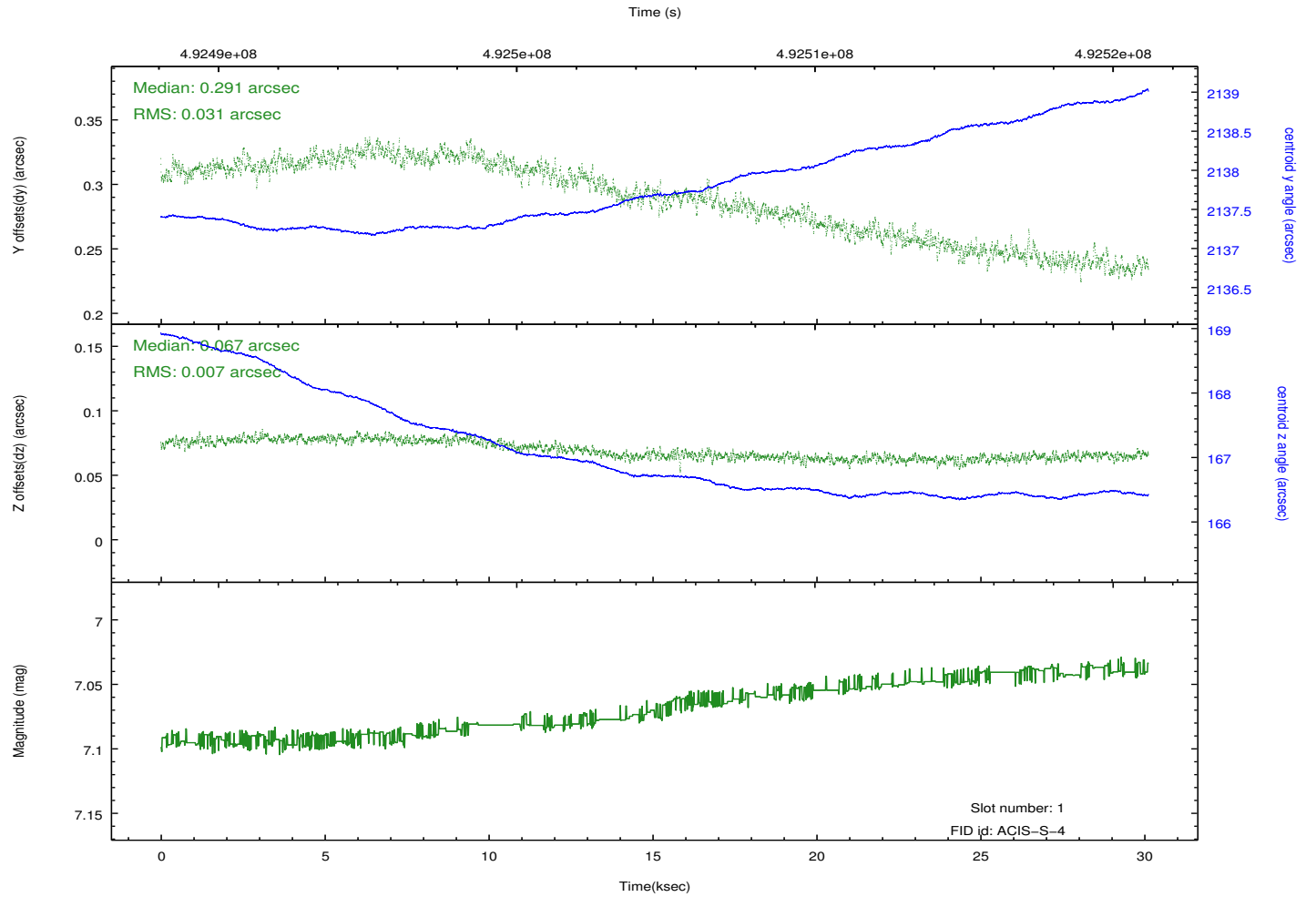
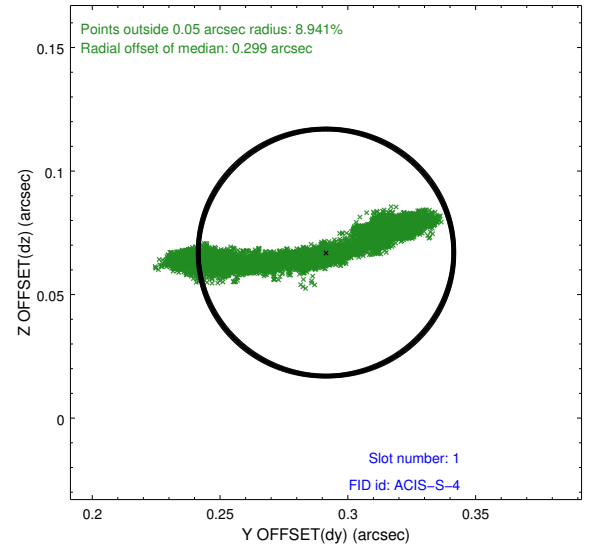
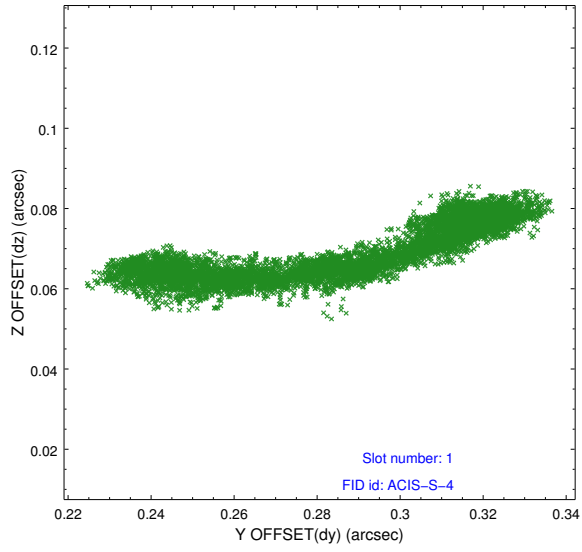


2.5 FID Slots

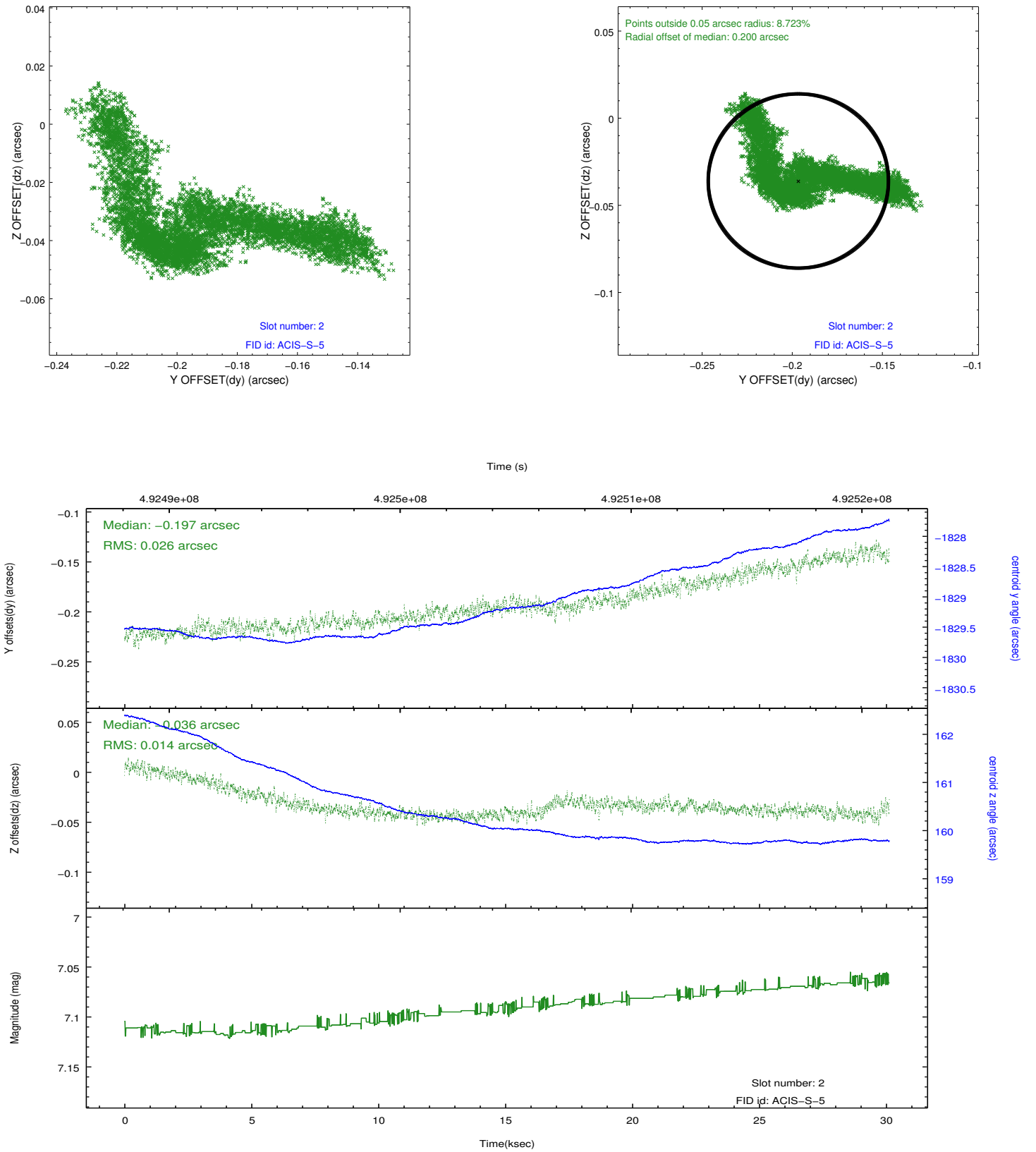
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.963764567435

A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.